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Subject: Comments regarding December 7, 2012 proposed rulemaking of Subtitle 12 A Building Code Supplement of 2013, Chapter 26, Section 2603.5.5,

The Extruded Polystyrene Foam Association (XPSA) appreciates the opportunity to offer comments regarding proposed revisions to the 2012 International Building Code through development and adoption of the Building Code Supplement of 2013.

### **First Comment**

XPSA recommends rejecting the proposed “Strike Section 2603.5.5 of the International Building Code in its entirety and insert new Section 2603.5.5 in the Building Code in its place” as published in the December 7, 2012 proposed rulemaking.

Reasoning and justification for this recommendation:

In essence, the published “strike and insert” of Section 2603.5.5 included in the December 7, 2012 proposed rulemaking will NOT improve the fire-safety of an exterior wall. The proposal will, in effect, allow the potential for vertical fire propagation to occur resulting in a reduction in fire safety.

The NFPA 285 test was developed to evaluate the vertical and lateral fire propagation through the foam plastic insulation when the foam plastic insulation is installed in exterior walls that are required to be noncombustible. In today's world of energy conservation, the foam plastic insulation is typically installed outboard of the supporting wall system and is continuous over the wall.

The December 7, 2012 proposed rulemaking seeks to add fireblocking within the exterior wall. The issue is: where is the fireblocking to be applied? For example, is the fire blocking to be applied within the stud cavities? If so, that application does nothing to prevent the spread of fire within the foam plastic insulation since the foam plastic insulation is usually outside the studs, yet, fireblocking in the stud cavities could be interpreted as meeting the proposed change. If the fireblocking is installed in the foam plastic continuous insulation, will the fireblocking also extend into the air cavity, or space, that can exist between the foam plastic insulation and the veneer. If fireblocking is placed in this space, how will water drainage be accomplished?

Additionally, if the exterior veneer is of a material that will melt (i.e. aluminum), or is combustible itself, the vertical flames from a fire can bypass the fireblocking.

A similar proposal was offered for the 2015 edition of the International Building Code and was rejected by the ICC membership at their Annual Meeting in Portland, OR in October, 2012.

Importantly, the foam plastic industry opposed that proposed change in the IBC because while the NFPA 285 test requirement of Section 2603.5.5 forces the industry to test and potentially change foam plastic insulation products to achieve successful fire test results, it is in the interest of fire safety to keep the NFPA 285 test requirement.

## Second Comment

In addition to rejecting the “strike and insert” of Section 2603.5.5 included in the December 7, 2012 proposed rulemaking, XPSA recommends retaining Section 2603.5.5 of the International Building Code and inserting new Exception 2 in Section 2603.5.5 in the Building Code to read as follows:

**2603.5.5 Vertical and lateral fire propagation.** The exterior wall assembly shall be tested in accordance with and comply with the acceptance criteria of NFPA 285.

### Exceptions:

1. One-story buildings complying with Section 2603.4.1.4.
2. Wall assemblies where the foam plastic insulation is covered on each face by a minimum of 1-inch (25 mm) thickness of masonry or concrete and meeting one of the following:
  - a. there is no air space between the insulation and the concrete or masonry; or
  - b. the insulation has a flame spread index of not more than 25 as determined in accordance with ASTM E 84 or UL 723 and the maximum air space between the insulation and the concrete or masonry is not more than 1-inch (25 mm).

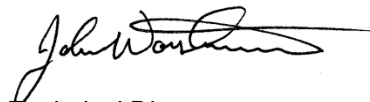
Reasoning and justification for this recommendation:

The inserted Exception 2 of Section 2603.5.5 of the International Building Code and was approved by the ICC membership at their Annual Meeting in Portland, OR in October, 2012.

A resource regarding NFPA 285 testing, and the history and importance of testing wall assemblies to NFPA 285, is the summer 2012 edition of the Journal of Building Enclosure Design, an official publication of the National Institute of Building Sciences Building Enclosure Technology and Environment Council, [http://www.wbdg.org/pdfs/jbed\\_summer12.pdf](http://www.wbdg.org/pdfs/jbed_summer12.pdf). The entire issue is dedicated to the complex challenges of fire safety of walls with foam plastic continuous insulation.

Best regards,

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